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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/766,616

01/23/2001

Jacob Kristian Osterling

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27045 7590 10/08/2003

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVW2-C-2
PLANO, TX 75024

EXAMINER

NGUYEN, TU X

ART UNIT

PAPER NUMBER

2684

9

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/766,616

Applicant(s)

OSTERLING ET AL.

Examiner

Tu X Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13, 15-25, 27 and 29-34 is/are rejected.
- 7) ☒ Claim(s) 12, 14, 26 and 28 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7. 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11, 13, 15-25, 27 and 29-34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Watters et al. (US Patent 6,230,018) and further in view of Tiedemann, Jr. et al. (US Patent 6,246,673).

Regarding claims 1, 15, Watters et al. disclose a method for adjusting the clock of a base transceiver station comprising the steps of:

providing the base transceiver station with an offset based on the relation (see col.11 lines 34-36); and

adjusting the base transceiver station's clock based on the offset (see col.7 lines 27-42, fig.6). The examiner interprets "timing" reads on "clock".

Watters et al. fail to disclose relating the base transceiver station's current time to a common time reference.

Tiedemann et al. disclose relating the base transceiver station's current time to a common time reference (see col.2 lines 22-24). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of waters et al. with the above teaching of Tiedemann et al. in order to

establishing handoff from a synchronous base station to an asynchronous base station or vice versa avoiding undesirable delays associated with determining the system time of the target base station.

Regarding claims 2 and 16, the modified Watters et al. disclose measuring the time of base transceiver stations surrounding the base transceiver station, and measuring the time of the base transceiver station's clock (see Watters, col.5 lines 14-39).

Regarding claims 3 and 17, the modified Watters et al. disclose providing a frame number and approximate control channel position of base transceiver stations surrounding the base transceiver station, wherein the time of base transceiver stations surrounding the base transceiver station and the time of the base transceiver station's clock are measured using the frame number and approximate control channel position (see Tiedemann, col.4 line 39 through col.4 line 12 and col.10 line 55 through col.11 line 10).

Regarding claims 4 and 18, the modified Watters et al. disclose the frame number is transmitted in a broadcast control channel and the approximate control channel position is a position of a shared control channel (see Tiedemann, col.4 lines 1-12). "BCCH" corresponds to "shared control channel".

Regarding claims 5 and 19, the modified watters et al. disclose the base transceiver station is provided with information from a location measurement unit, wherein the base transceiver station's clock is adjusted based upon the information from the location measurement unit (see Watters, col.5 lines 14-39).

Regarding claims 6 and 20, the modified Watters et al. disclose wherein the location measurement unit is associated with the base transceiver station (see Watters, col.1 lines 60-67).

Regarding claims 7, 21 and 30, the modified Watters et al. disclose the location measurement unit is associated with another base transceiver station, wherein the another base transceiver station is within radio range of the base transceiver station (see Watters, col.3 lines 9-15).

Regarding claims 8, 22 and 31, the modified Watters et al. disclose the information contains an indication of the accuracy of the clock of a base transceiver station used for generating the information (see Watters et al., col.4 line 51 through col.5 line 40).

Regarding claims 9 and 23, the modified Watters et al. disclose if the common time reference is not available, another base transceiver station's clock is used as the common time reference (see col.7 lines 27-30).

Regarding claims 10 and 24, the modified Watters et al. disclose another base transceiver station's clock is used for synchronization of equipment co-sited with the base transceiver station (see col.11 lines 10-20). "neighboring base station" corresponds to "co-sited base station".

Regarding claims 11, 13, 25, 27 and 33, the modified Watters et al. disclose determining global positioning satellite time; and comparing the GPS time to the time of the base transceiver station's clock, wherein the base transceiver station's clock is

adjusted based upon the offset and the comparison (see Watters, col.4 line 51 through col.5 line 40 and col.11 lines 17-40).

Regarding claim 29, the modified Watters et al. disclose everything as claims 1 and 5 above.

Regarding claim 32, the modified Watters et al. disclose another base transceiver station (BTS1, BTS2, fig.3); and another location measurement unit (mobile calibration terminal, fig.3), wherein if the location measurement unit is not operative, the base transceiver station's clock is adjusted (see col.11 lines 17-40) using information provided by the another location measurement unit (Calibration terminal, fig.3).

Regarding claim 34, the modified Watters et al. disclose the common time reference is global positioning satellite (GPS) time (see Tiedemann, col.9 lines 35-37).

Allowable Subject Matter

3. Claims 12, 14, 26 and 28 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding dependent claims 12 and 26, none of prior art teaching "means for providing assistance data for decoding the chip sequence of a GPS signal".

Regarding dependent claims 14 and 28, none of prior art teaching "the offset is provided by a serving mobile location center"

Art Unit: 2684

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is (703) 305-3427. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7749.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office at (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

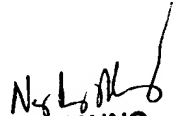
or faxed to:

(703) 872-9314 (Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park-II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

TN

September 18, 2003


NAY MAUNG
SUPERVISORY PATENT EXAMINER